ACCESSIBILITY STANDARD

ADOPTED BY

THE

SASKATCHEWAN HUMAN RIGHTS COMMISSION

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ACCESSIBILITY STANDARD

Submitted by

THE PROVINCIAL ACCESSIBILITY COMMITTEE OF SASKATCHEWAN

Joan Blanchette, Executive Director
Saskatchewan Interagency Committee on Leisure

Pat Danforth, Co-ordinator
Voice of the Handicapped

Anne Gossland, Program Director
Saskatchewan Council for Crippled Children and Adults

Donna Greschner, Legal Advisor

Peter Holdstock, Architect

Don McFadyen, Executive Director
Canadian Parplegic Association

Penny McKinlay, President
Saskatoon Chapter, Voice of the Handicapped

Ailsa Watkinson, Education Officer
Saskatchewan Human Rights Commission

Cathy Wedge, Legal Advisor

PLEASE NOTE THE FOLLOWING:

1. mm is the symbol for millimeters
   m is the symbol for meters
   N is the symbol for newtons
   lx is the symbol for illuminance
   m^2 is the symbol for square meters

2. All references to the National Building Code are to the 1980 edition.

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Interpretation

1. In the Saskatchewan Human Rights Code:

(1) "Discrimination because of the physical disability of a person or class of persons includes, but is not limited to, the absence of accessibility with respect to accommodation, services or facilities to which the public is customarily admitted or which are offered to the public, created by the failure to meet the Accessibility Standard prescribed herein.

(2) "Accommodation, services or facilities to which the public is customarily admitted or which are offered to the public" means all publicly- and privately-owned buildings and facilities whether or not regulated by the National Building Code, and includes, but is not limited to:

(a) appurtenant grounds;

(b) curbs and facilities at crosswalks and intersections;

(c) places of employment, but does not include a second storey or a basement which is not larger than 930 m^2, in a building which is privately owned and which does not have more than two storeys in total;

(d) publicly- and privately-owned residential and sleeping occupancies, including condominiums, apartment buildings, hotels and motels, but not including private residences, the primary function of which is single- or two-family occupancy, and second and third stories of (frame) apartment buildings;

(e) educational and institutional facilities of a public or private nature, including daycare centres, primary, secondary and post-secondary schools, secretarial schools and health facilities;

Section 1, Interpretation, cont'd

(f) all places of entertainment, amusement, recreation or assembly customarily available to the public, including establishments where food or beverages are sold for consumption on the premises and all establishments which cater or offer their services or goods to, or solicit patronage from, the general public;

(g) outdoor areas customarily available to the public, including parks, camping grounds, public swimming pools, fairgrounds and playgrounds;

(h) places of worship and meditation, including ancillary facilities.

Interpretation

2. In the Accessibility Standard:

"Accessibility"

(1) "accessibility" is the combination of various elements of the built environment which allows entrance to, egress from, and use of buildings, grounds and facilities by the public;

"Alteration"

(2) "alteration" means any alteration as defined by the National Building Code, whether or not the accommodation, services or facility to which Section 1(2) refers, that is undergoing the alteration is regulated by the National Building Code;

"Audible Cue"

(3) "audible cue" is a sound or verbal communication or alert;

"Authority Having Jurisdiction"

(4) "authority having jurisdiction" means an administrative agency and includes, but is not limited to, a building department, or other regulatory agency having jurisdiction over the issuance of building or occupancy permits;

"Curb Ramp"

(5) "curb ramp" is a pedestrian ramp which cuts through a curb or builds up to it from a lower level to connect two horizontal levels;

Section 2, Interpretation, cont'd

"Hazards" (6) "hazards" means any obstructions potentially detrimental to the safe passage of a physically disabled person, including, but not limited to, driveway openings, angle guywires, fire hydrants, glass walls, glass doors, landscaping, and all types of site furniture;

"In-car Laterns" (7) "in-car lanterns" are visual signs located on elevator car door jambs indicating the direction of travel;

"Long-cane Technique" (8) "long-cane technique" means the use of a cane by the visually impaired which allows the detection of obstacles within the path of travel if the obstacles fall within 686 mm approximately from the floor or ground surface;

"Major Entrance" (9) "major entrance" is any access point to a building or facility, or portion of a building or facility, used for the purpose of entrance or egress, but does not include doors to fire stairways or other emergency exits, or doors to elevator penthouses, boiler rooms, air conditioning fan rooms and truck bays or other doors used for servicing the building or facility;

"Occupancy" (10) "occupancy" is the purpose for which a building is used or is intended to be used;

"Path of Travel" (11) "path of travel" is a dignified route as direct as site conditions allow, taken by people from one place to another in the built environment, including both horizontal and vertical travel;

"Public" (12) "public" means users of accommodations, services, or facilities, including persons with physical disabilities, and including, but without limiting the generality of the foregoing, visitors and employees;

"Site Furniture" (13) "site furniture" is permanent equipment located on the site outside of accommodations, services or facilities, and includes, but is not limited to seating,tables, lighting poles, telephones, drinking fountains, signs, trash cans, planters, mail boxes, advertising kiosks,

Section 2, Interpretation, cont'd

newspaper boxes, and other devices of a functional or decorative nature;

"Tactile Cue"

(14) "tactile cue" is a device perceived by using the sense of touch that prepares, alerts or warns people.

Application

3. The Accessibility Standard prescribed herein applies to:

(1) an alteration to existing accommodation, services or facilities to which section 1(2) refers; and

(2) accommodation, services or facilities to which section 1(2) refers that are constructed after the Standard comes into force; and

(3) changes of occupancy in accommodation, services or facilities to which section 1(2) refers; and

(4) additions to accommodation, services or facilities to which section 1(2) refers.

Exterior Paths of Travel

4. (1) At least one exterior path of travel having no stairs or escalators shall provide access to each major entrance to accommodation, services or facilities referred to in section 1(2).

(2) The paths of travel referred to in subsection (1) shall not have a slope greater than 1:12, except for curb ramps. A slope of 1:20 is preferred. Ramps shall comply with Section 14, Ramps.

(3) When parking areas are provided, they shall comply with Section 8, Parking.

(4) If moving walkways are provided, they shall be wide enough to accommodate a wheelchair and have a minimum clear width of 915 mm; handrails shall be provided according to Section 16, Handrails and Guardrails.

Section 5, Walks

Walks

5. (1) The minimum clear width of walks shall be 915 mm. Walks less than 1.5 m wide shall have places wide enough for two wheelchairs to pass, such places to be 1.5 m in width and 2 m minimum in length, and occur at intervals not to exceed 30 m. Where the incidence of people in wheelchairs or those using walking aids is high, such as at health facilities or special housing, the minimum width of all walks there shall be 1.5 m.

(2) Walks shall be of a continuing common surface, not interrupted by abrupt changes in level. Surfaces shall be firm and stable and shall not present slipping hazards.

(3) Large areas or long stretches of small unit components such as brick and stone, shall not be used on accessible paths of travel unless the components are laid on a firm base, and the unprotected joints do not exceed 15 mm in width and are flush with the adjoining surfaces.

(4) Walks with gradients steeper than 1:20 shall be considered as ramps and conform to the requirements of Section 14, Ramps, and Section 16, Handrails and Guardrails. Ramps on walks shall not be steeper than 1:12.

(5) Walks with sustained gradients of no greater than 1:20 shall have level areas of at least 1.5 m in length at approximately 30 m intervals for the purpose of rest.

(6) The cross slope or crowning of walks shall be between 1:50 and 1:100. Where vehicular driveways intersect with walks, design priority shall be given to the pedestrian and not the vehicle.

(7) Grating, manhole covers and other access covers shall be placed outside of walks unless prevented by site constraints. Where they must occur in walks, gratings shall have a maximum clear opening of 10 mm in the narrow direction and the long dimension must be at right angles to the direction of pedestrian travel along the walk. Solid

Section 5, Walks, cont'd

covers occurring in walks shall not have changes in the vertical surface dimension that exceed 6 mm.

(8) Walks shall preferably be level at building entrances but where drainage is required, the area in front of the door may be sloped no more than 1:50. This area shall extend at least 500 mm beyond the handle side of the door and be a minmum of 1.5 m in depth from the face of the door.

(9) When a hazardous area occurs alongside a walk or pedestrian area, a barrier shall be provided to warn the blind and to prevent persons from inadvertently leaving the walk. See Section 10, Barriers.

(10) No rigid or hard object shall project into the space above a walk lower than 2.25 m measured from the walk surface. Below this height, protruding objects which project more than 100 mm from a wall or column must:

(a) continue to the floor; or

(b) continue to within 200 mm of the floor; or

(c) be located in protected areas which are recessed or enclosed by wing walls.

Door and door closers do not have to conform to the above requirement. Where low ceiling heights prohibit the placing of emergency exit signs above 2.25 m from the floor level, these signs may be placed at a minimum of 2 m from finished floor level to the bottom of the sign.

(11) Walks shall be free of hazards. Where landscaping is adjacent to walks, overhanging branches shall be pruned back so as not to be a hazard.

Curb Ramps

6. (1) Whenever walks intersect with other walks, parking lots, driveways or streets, the surfaces shall blend to a common level to allow smooth passage of wheelchairs.

Section 6, Curb Ramps, cont'd

(2) The minimum width of curb ramps shall be 915 mm measured across the usable surface of the ramp.

(3) Curb ramps shall be no steeper than 1:12. When there is no other way of overcoming the constraints of an existing walk condition, the slope may be increased in steepness, but shall not exceed 1:8. The curb ramp surface shall blend with the street at a common level. There shall be no lip at the bottom of the ramp. The sides of the curb shall not be steeper than 1:8. The whole curb ramp shall contrast in colour and texture to the surrounding walk surface. See Section 24, Tactile Cues.

(4) Curb ramps shall be designed so that they direct people into the crossing. Type A as illustrated in Figure 5(4)A is the preferred design and shall be mandatory where site conditions allow. Type B as illustrated in Figure 5(4)B shall be used only where Type A is not possible.

(5) The surface of curb ramps shall be joint free and slip resistant. See Section 25, Floor Surfaces.

Street Crossings

7. (1) Street crossings shall be considered as continuations of walks and meet the requirements of Section 5, Walks, and Section 6, Curb Ramps.

(2) Where street crossings intersect with islands, the surface of the islands shall blend to a common level with the crossing surface. The surface of the crosswalk at the island shall have a different texture and colour to give indication to the visually impaired. See Section 24, Tactile Cues.

(3) Islands shall be a minimum of 1.2 m wide to prevent people in wheelchairs from protruding into the flow of vehicular traffic when waiting to continue crossing. A support device shall be provided to steady people with balancing problems while they wait for vehicles to stop moving. The support device may be a guardrail or pole. See Figure 6(3).

Section 7, Street Crossings, cont'd

(4) Pedestrian overpasses and underpasses shall meet the applicable requirements of this Standard and follow the requirements of Section 14, Ramps, and Section 5, Walks.

Parking

8. (1) Parking areas include interior and exterior parking spaces, parking lots and passenger loading zones.

(2) When parking areas are provided, they shall have parking spaces for persons with physical disabilities located as close as possible to the shortest accessible path of travel to each building, adjacent street or walk served by that parking area and the distance from the parking spaces to each building, adjacent street or walk served by that parking area shall not exceed 50 m. If passenger loading zones are provided, they shall be close to the aforementioned path of travel. If walks are provided through the parking area, they shall comply with the requirements of Section 5, Walks.

(3) Passenger loading zones shall provide an unobstructed space at least 1.2 m wide, parallel to the vehicle, to allow unloading and loading of passengers. There shall be no abrupt change of level between the passenger loading zone and the road. There shall be a change of surface texture and colour to indicate the boundary of the space used by pedestrians. See Section 24, Tactile Cues.

(4) Parking spaces for persons with physical disabilities shall be at least 3.7 m wide. Where two adjacent spaces are planned, and entry can be gained by the car going in forward or reverse, the width of both spaces plus access aisle shall be a minimum of 6 m, with the access aisle located between the two spaces. If entry can only be gained by going forward, each space for persons with physical disabilities shall have an access aisle. The access aisles shall be at least 1.2 m wide and preferrably be level, but may have a slope for drainage not exceeding 1:50. The surface shall be firm.

Section 8, Parking, cont'd

(5) The minimum number of parking spaces planned for persons with physical disabilities in parking lots shall be as follows:

(a) where the total number of parking spaces is from 1 to 10, one parking space shall meet the requirements of Section 7(4);

(b) where the total number of parking spaces is from 11 to 400, parking spaces that meet the requirements of Section 7(4) shall number the greater of 2 or 2% of the total provided;

(c) where the total number of parking spaces is above 401, parking spaces that meet the requirements of Section 7 (4) shall number 8 plus 1% of the total provided above 401.

Where parking is being provided for special facilities for persons with physical disabilities, or for health care institutions, an increased ratio of parking spaces for the physically disabled shall be provided.

(6) A minimum headroom of 2.4 m shall be provided for circulation and parking of vans used by persons with physical disabilities. The number of spaces to be provided with this clearance shall be one for a parking lot referred to in Section 8(5)(a) and half the number of spaces computed for persons with physical disabilities in a parking lot referred to in Section 8(5)(b) or (c). The access aisle shall be 1.8 m wide, and it may extend into the vehicular circulation route when parallel parking is provided.

(7) Multi-storey parking structures without elevators shall have spaces reserved as required by Section 8(9) on an accessible floor.

(8) Where curbs are required around the parking area, curb ramps shall be provided to the accessible path of travel,

Section 8, Parking, cont'd

and shall conform to the requirements of Section 6, Curb Ramps.

(9) Parking spaces referred to in Section 8(5)(b) and (c) for persons with physical disabilities shall be marked to indicate that they are reserved for physically disabled persons, using the International Symbol for Accessibility. See Figure 22(9). Signs designating van spaces for persons with physical disabilities shall be posted where appropriate. Such markings shall be placed on a pole or wall and may be accompanied by markings painted on the surface of the parking spaces.

(10) Where pedestrian walks in parking lots cross vehicular routes, the intersection shall be clearly marked so that drivers shall be warned of the pedestrian crossing.

Site Furniture

9. (1) The location of site furniture shall be located on firm level surfaces and allow free passage and full, non-hazardous use of site amenities.

(2) If any furniture is mounted on a post or pylon and projects more than 100 mm into an area which cannot be detected by the long cane technique, then the projection shall:

(a) continue to the floor, or

(b) continue to within 200 mm of the floor, or

(c) be located in protected areas which are recessed or enclosed by wing walls; such a protected area shall have a contrasting floor texture and colour.

(3) Signs shall not project into the space above a walk unless the distance from the bottom edge of the sign to the walk surface is at least 2.25 m.

(4) Guywires required for poles or pylons shall be placed outside of pedestrian circulation areas.

Section 9, Site Furniture, cont'd

(5) Where rest areas are provided, space shall be included alongside the seating to accommodate those in wheel chairs. This space shall be a minimum of 915 mm wide and extend to a minimum of 1.2 m from the pedestrian flow. Textural change to the surface of the rest area shall be provided as a tactile cue. See Section 24, Tactile Cues. See Figure 9(5).

(6) Seating shall be constructed to support a minimum of 115 kg for each person accommodated, and be provided with back and armrests. Seating shall not hold water.

(7) Where tables are provided:

(a) they shall be designed to accommodate a wheelchair; and

(b) there shall be a clear space of 710 mm minimum from the ground to the underside of the table; and

(c) there shall be toe clearance underneath the table of 600 mm deep and the space shall be at least 760 mm wide;

except that tables designed for children are not limited by the foregoing requirements.

(8) Any devise used by shops and stores to prevent shopping carts from leaving the premises shall not prevent access to such shops and stores for persons in wheelchairs. Entry shall be equally convenient for persons with physical disabilities. See Section 11, Entrances, Doors and Doorways, and Section 12, Door Handles.

(9) Controls, dispensers and receptacles shall comply with Section 26, Location of Controls, Dispensers and Receptacles.

(10) For requirements of exterior stairs and ramps, see Section 14, Ramps, and Section 15, Stairs.

Section 9, Site Furniture, cont'd

(11) Exterior pay telephones shall comply with the requirements of Section 21, Coin Operated Public Telephones.

Barriers

10. (1) Hazardous reflecting pools, planting areas and other landscape features occurring in or adjacent to walks shall have barriers of not less than 150 mm high. Tree grills shall meet the requirements of Section 5(7), Walks.

(2) Where walks pass alongside or over ditches, embankments or other hazardous areas, guardrails shall be located on the hazardous sides of the walk and shall meet the requirements of Section 16, Handrails and Guardrails.

(3) Chains, cables or ropes are not acceptable as permanent or temporary barriers unless they can be detected by the long cane technique.

(4) Where temporary barriers are required, the barrier shall be designed to be detected by the long cane technique and shall protect all sides of the work opening, or excavation. Visible warnings shall be provided at night.

(5) Where temporary walks are provided around building sites or other situations, the temporary walk shall conform to all requirements of Section 5, Walks. All accessible features temporarily closed by any work shall have alternate accessible features readily available.

Entrances, Doors and Doorways

11. (1) All major entrances to spaces within a building or facility, including rooms, shall comply with this section.

(2) (a) The floor on the inside and outside of each doorway shall preferably be level, but may slope no more than 1:50 for drainage purposes.

(b) On the pull side of the door, when location allows forward access only for those in wheelchairs, the floor shall be clear for a distance of 1.5 m from the door and shall extend a minimum of 500 mm beyond

Section 11, Entrances, Doors and Doorways, cont'd

the pull side of the door, measured from the wall opening, unless doors are automatic.

(c) Where side access for those in wheelchairs is possible, the floor shall be clear for a distance of 1.2 m from the door.

(d) On the push side of the door, the floor shall be clear for a depth of 1 m in buildings and facilities referred to in Section 1(2)(d) and 1.2 m in all other buildings and facilities, and be clear at least the full width of the door opening.

(3) When turnstiles or revolving doors are provided, an entrance in compliance with this section shall be placed immediately to one side of the revolving doors or turnstiles.

(4) The doors of the major entrance shall have opening devices on both faces of the door, and shall not be locked during regular business hours.

(5) Major entrances shall have a minimum clear width of 750 mm. This dimension shall be measured from the face of the door to the face of the door stop.

(6) Where more than one door is required at major entrances, a left and right-handed door shall be provided to give persons with physical disabilities the choice of door to open which corresponds to their strongest arm.

(7) (a) The minimum space between two hinged doors in a series shall be the width of the doors swinging into the space plus 1.2 m.

(b) Door swings of doors in series shall open in the same direction.

(c) Single doors hung in a series shall be hinged at the same side.

Section 11, Entrances, Doors and Doorways, cont'd

(d) At vestibules where doors are at right angles to each other, the dimensions between the wall with the in-swinging door and the facing wall shall be 2 m minimum. The minimum dimension in the other direc-

(8) Where double doors are used, at least one leaf shall allow a 750mm clear opening. A minimum clear opening of 750mm allowed by each leaf is preferred.

(9) If door mats are provided at major entrances, they shall be firmly secured and shall not project more than 15 mm above the floor finish.

(10) (a) Gratings provided at doors for the removal of snow, sand, mud and other substances shall have a grid opening of no more than 10 mm in the narrow direction; the long direction shall run at right angles to the direction of pedestrian travel.

(b) Surfaces of gratings shall be level with the adjacent floor surface.

(11) (a) The maximum height of thresholds at exterior and interior doors shall be 15 mm and they shall be beveled to allow wheelchair access.

(b) Thresholds shall not have a vertical change in level.

(c) Where there are differences in floor level between rooms or spaces, the threshold shall be sloped at no more than 1:20, except where such threshold is expressly prohibited by other regulations in force in the province.

(12) Where sliding doors are used, the opening shall be exposed and usable from both sides when the door is in the open or closed position. Automatic doors are exempt from this requirement.

Section 11, Entrances, Doors and Doorways, cont'd

(13) At least the bottom 250 mm of the doors shall have a smooth and uninterrupted surface. When narrow frame doors are used, a 250 mm high smooth panel applied to the frame or a solid flush inset panel raising the height of the bottom rail to 250 mm are both acceptable. Automatic and sliding doors are exempt from this requirement.

(14) (a) The force required to open the door shall not exceed:

(i) 53 N for an exterior hinged door, and
(ii) 22 N for an interior hinged door, and
(iii) 22 N for a sliding or folding door.

(b) The force required to open the door shall be:

(i) pulled perpendicular to the door at the door push/pull, or 760 mm from the hinge side of the door, whichever is the furthest distance from the hinge, or
(ii) parallel to the door at the door opener side of sliding or folding doors.

(15) If a door closer is required:

(a) it shall comply with the requirements of the National Building Code;

(b) it shall have a delay feature keeping the door open for a minimum of 5 seconds before beginning to close.

(c) the closing period shall be adjusted so that the door will close in a minimum of 3 seconds from an open position of 70 degrees.

(16) Automatic swing doors shall not open into passing pedestrian traffic unless suitable guardrails or other protec-

Section 11, Entrances, Doors and Doorways, cont'd

tive methods detectable by the long cane technique are used to protect passers-by from the swing of the door.

Door Handles

12. (1) All manual door openers shall have a lever design or other shape which is easy to operate and grasp. They shall be mounted 915 mm to 1050 mm from the floor surface to the centre of the actuating portion of the device.

(2) Manual door openers shall be designed with no sharp corners or edges. The opener shall be of a type that minimizes the catching of clothes on the device.

(3) Clearance between the handle and the door shall be a minimum of 50 mm.

(4) Where door push plates are an integral part of the door stile, the push plate shall be of a contrasting colour.

(5) Where the door opening device is a bar extending from stile to stile, the side of the bar to be pulled or pushed shall be distinguished with a change of colour and texture.

(6) The hardware for doors into hazardous spaces shall have a change in texture provided either by knurling or by applying an abrasive finish to the handles. Hazardous spaces include, but are not limited to boiler rooms, electrical rooms and loading docks. See Section 23, Emergency Warning Signals and Alarms.

Interior Paths of Travel

13. (1) All spaces in a building or facility shall be served from a major entrance in compliance with Section 11, by at least one path of travel that does not have stairs or escalators, except those areas within 39(2) and 39(3).

(2) Every space referred to in Section 13(1) shall be served by a path of travel that does not require use of stairs, escalators or elevators in an emergency to reach at least one means of egress or place of refuge, and

Section 13, Interior Paths of Travel, cont'd

(a) the means of egress shall conform to Section 3.4 of the National Building Code, except that stairs or escalators shall not be required to gain access to an approved open space with access to a public thoroughfare;

(b) the place of refuge shall consist of at least 1 m^2 of clear level floor area in addition to that required for exit purposes within a protected enclosure conforming to subsections 3.4.4 and 3.4.5 of the National Building Code. Configuration of place of refuge shall accommodate one wheelchair so as not to obstruct exit ways. The door shall comply with Section 11, Entrances, Doors and Doorways.

(3) Drinking fountains, public toilet rooms, fire alarms, vending machines and public telephones shall be located adjacent to accessible paths of travel and shall meet the applicable requirements of this Accessibility Standard.

(4) (a) The minimum clear width of halls, corridors, passageways and aisles shall be 915 mm. See Section 11(2)(d), Entrances, Doors and Doorways.

(b) Where there is likelihood of there being several persons in wheelchairs in a building, the minimum width of halls, corridors, passageways and aisles shall be 1.5 m to allow wheelchairs to pass.

(5) Stairways shall not lead directly into or out of a path of travel, unless a tactile cue is provided. See Section 15, Stairs.

(6) No rigid or hard object shall project into the space above a path of travel unless the distance from the bottom edge of the object to the walk surface is at least 2.25 m.

(a) Below this height, protruding objects which project more than 100 mm from a wall or column must:

Section 13, Interior Paths of Travel, cont'd

(i) continue to the floor; or
(ii) continue to within 200 mm of the floor; or
(iii) be located in protected areas which are recessed or enclosed by wing walls; such a protected area shall have a contrasting floor texture and colour.

Doors and door closers do not have to conform to this requirement.

(b) Where low ceiling heights prohibit the placing of emergency exit signs at 2.25 m above the floor, these signs may be placed at 2 m from the finished floor to the bottom of the sign.

Ramps

14. (1) Any part of a path of travel shall be considered a ramp if it has a slope that is greater than 1:20. A slope of 1:20 is preferred for ramps of all lengths. The maximum slope of a ramp shall be 1:12 except for curb ramps.

(2) All segments of ramps shall have identical slopes.

(3) All ramps occurring along a permanent path of travel or fire exit shall be of fixed permanent construction.

(4) All ramps shall allow unrestricted travel and be free of hazards.

(5) Exterior ramps shall not begin or end in an area where standing water will accumulate on the walking surfaces.

(6) Weepholes in retaining walls abutting exterior ramps shall not drain across the surface of the ramp.

(7) All ramps with a verticle rise greater than 230 mm, except curb ramps, shall have handrails on both sides, and

(a) the handrails shall be 815 m to 915 m in height, measured vertically from the surface of the ramp,

Section 14, Ramps, cont'd

and shall extend at least 500 mm beyond the top and bottom of the ramp segment; and

(b) handrails shall be continuous along the rampway; and

(c) if children are frequent users of the building, then a second set of handrails shall be provided at a height of 600 mm; and

(d) handrails shall comply with Section 16, Handrails and Guardrails

(8) Wheelchairs and walking aids shall be protected from slipping off edges of the ramp by means of:

(i) flanking walls, or
(ii) curbs at edges, or
(iii) extended ramp surface at edges.

(9) (a) Ramps shall have a minimum clear width of 915 mm.

(b) Where passing of wheelchairs can be expected on the ramps, the minimum clear width shall be 1.5 m.

(10) (a) Ramps shall have level platforms at the bottom and the top of each run, at least 1.5 m long, and they shall be at least as wide as the ramp.

(b) Intermediate platforms shall be 915 mm minimum between each ramp segment.

(c) The maximum allowable lengths of ramp segments must comply with Table 1.

(d) Intermediate turning platforms shall be level and a minimum of 1.5 m deep and 1.83 m wide to allow wheelchair manoeuvering through 180 degrees, and at least 1.5 m deep and 915 mm wide for turns of 90 degrees.

Section 14, Ramps, cont'd

(11) (a) If doorways are located at the platforms, the area in front of the doorways shall comply with Section 11, Entrances, Doors and Doorways.

(b) If doors open out on to the ramp platform, a level area at least 1.5 m deep and 1.5 m wide shall be provided.

(12) The ramp surface shall be slip resistant. See Section 25, Floor Surfaces.

(13) No object shall project into the rampway lower than 2.25 m from the surface of the ramp or landing, except handrails. See also Section 5(9), 5(10) and 5(11).

Stairs

15. Except where stated otherwise, the requirements of this section apply to both interior and exterior stairs and ramps.

(1) The finish for treads and landings of interior and exterior stairs and ramps accessible to the public shall have slip resistant finish. See Section 25, Floor Surfaces.

(2) No flight of stairs shall have a vertical rise of more than 3.6 m between floors or landings, except that flights of stairs serving rooms intended for infirm persons, or having a high occupant load, shall have a vertical rise of not more than 2.4 m between floors or landings.

(3) (a) Treads and risers in every stair shall be proportioned so that the product of the rise and run in millimetres shall not be less than 45 000 and no more than 48 500; risers shall have a maximum rise of 200 mm and a minimum rise of 125 mm treads shall have a minimum run of 230 mm exclusive of rise or back slope;

(b) Where the run of any tread in a stair is less than 250 mm, a back slope on the riser shall be provided to produce a tread depth of at least 250 mm;

Section 15, Stairs, cont'd

(c) The front edge of stair treads shall be at right angles to the direction of travel.

(4) All risers and treads shall have uniform dimensions in any one flight, and shall not alter significantly in run and rise in successive flights in any stair system.

(5) (a) Stair treads shall not have abrupt or squared nosing configurations;

(b) A riser back slope shall be 38 mm maximum from the vertical;

(c) The radius of curvature at the edge of the tread shall be no greater than 13 mm;

(d) The edge of the nosing shall be clearly distinguishable. See Section 25, Floor Surfaces.

(6) Where a stairway intersects a path of travel at right angles;

(a) the first riser shall be set back at least 50 mm from the path of travel, and

(b) tactile cues shall be located along the edge of the path of travel. See Section 24, Tactile Cues.

(7) (a) Every stairway shall have a handrail on at least one side, and where 1.1 m or more in width, shall have handrails on both sides;

(b) Handrails on stairs and ramps shall not be less than 800 mm and not more than 920 mm in height, measured vertically from a line drawn through the outside edges of the stair nosing, except that handrails not meeting these requirements are permitted providing they are installed in addition to the required handrails;

Section 15, Stairs, cont'd

(c) Windows in stairways that extend to less than 1.07 m above the landing shall be protected by a barrier or railing located approximately 1.07 m above such landing;

(d) Handrails shall extend horizontally a minimum of 500 mm beyond the top riser, and 500 mm plus the tread width beyond the bottom riser; this requirement does not apply to centre handrails of dog-leg stairs if there are conforming handrails on the other side of the stairs.

(8) (a) Every ramp and stairway shall have a wall or well-secured guardrail on each side. See Section 16, Handrails and Guardrails.

(b) The height of guardrails on stairs and ramps shall not be less than 800 mm and not more than 920 mm measured vertically to the top of the guardrail from a line drawn through the outside edges of the stair nosing and 1.07 m around landings. See Section 16, Handrails and Guardrails.

Handrails and Guardrails

16. (1) Handrails shall be designed to permit continuous sliding of hands; the hardware chosen for attaching handrails to balusters or walls shall be such that no projecting lugs, devices or other construction elements shall interrupt the continuous sliding of the hand, or engage loose clothing.

(2) The anchoring of posts and framing of members for handrails and guardrails shall be of such construction that the completed structures shall be capable of withstanding a load of at least 1100 N applied in any direction at any point on the top rail.

(3) (a) Handrails shall be designed to allow the natural opposing grip;

Section 16, Handrails and Guardrails, cont'd

(b) The outside diameter or width of the rails shall be 32 to 38 mm.

(4) Handrails and guardrails, including fasteners, shall have no sharp edges or dangerous protrusions; edges shall have a minimum radius of 3 mm.

(5) (a) Handrails shall have a clearance of 40 mm between the rail and the wall;

(b) When the surface of the wall is rough, protection shall be required behind the handrail to prevent knuckles being scraped on the wall surface, except in fire stairs and buildings with alternate methods of vertical circulation.

(6) Projecting ends of handrails or guardrails shall return smoothly to the wall, floor or post.

(7) A tactile cue shall be placed on the top surface of the handrail of enclosed stairs at the main exit floor.

(8) Where a stair exceeds 2.2 m in width, one or more intermediate handrails continuous between landings shall be provided, and the number and position of these intermediate handrails shall be such that there will not be more than 1.65 m between handrails.

(9) (a) All unenclosed floor openings, and open sides of landings, balconies, accessible roofs or porches, shall be protected by guardrails not less than 1 m in height;

(b) Where guardrails are required within individual dwelling units, the height of the guardrail may be 915 mm.

(10) The size of any opening through guardrails shall be such as to prevent the passage of a spherical object having a diameter of 100 mm in buildings of residential occupancy,

Section 16, Handrails and Guardrails, cont'd

and 200 mm in buildings of other occupancy, unless it can be shown to the satisfaction of the authority having jurisdiction that the location and size of the openings that exceed the limit do not present a hazardous condition.

Elevators

17. (1) Elevators shall comply with the C.S.A. Standard B44 - 1975, Safety Code for Elevators, Dumbwaiters, Escalators and Moving Walks, and to Saskatchewan Regulations and to the requirements contained in this section.

(2) (a) Paths of travel that do not have stairs or escalators shall be provided to the elevator lobby from:

(i) a major entrance which complies with Section 11, Entrances, Doors and Doorways;
(ii) all major areas of the building;

(b) Directional signs shall be provided when the elevator location is not obvious. See Section 22, Communication and Identification.

(3) No rigid, hard object shall project into the elevator lobby space unless the dimension from the bottom edge of the object to the floor surface is at least 2.25 m; below this height, protruding objects which project more than 100 mm from a wall or column must meet the requirements of Section 13(6)(a) and (b).

(4) The floor surface of the lobby shall meet the requirements of Section 25, Floor Surfaces, to provide a surface that ensures easy manoeuverability for those in wheelchairs.

(5) All elevator hoistway entrances shall have floor numbers provided at each jamb:

(a) the centreline of these characters shall be located 1.5 m from the floor;

Section 17, Elevators, cont'd

(b) the size of the characters shall be a minimum of 50 mm high and shall be raised at least 0.8 mm;

(c) the character shall be of a contrasting colour with the surface on which it is mounted, preferably a light colour on a dark background. Permanently applied plates are acceptable.

(6) (a) All elevator lobbies shall have the call buttons located so that the centreline of the group of buttons is 1 m from the floor surface;

(b) Where only one call button is required, the mounting height shall be 1 m to the centre of the button;

(c) Call buttons at the main entrance and transfer floors shall be identified by a sign indicating the floors served by such elevators, this sign shall have characters raised at least 0.8 mm from the surface, have sharply defined edges, and shall be at least 15 mm high. The characters shall be a contrasting colour to the background, preferrably a light colour on a dark background.

(7) All hoistway entrances shall have visible and audible signals to indicate an approaching car and its direction of travel;

(a) the centreline of the visible signal shall be a minimum of 1.8 m from the lobby floor;

(b) arrow shapes for directional indication, consistent with the direction of travel, shall be used;

(c) each symbol shall be 64 mm high, and shall be visible from the proximity of the lobby call buttons;

(d) the colour white shall be used for the "up" symbol, and the colour red for the "down" symbol;

Section 17, Elevators, cont'd

(e) audible signals shall sound once for the "up" elevator and twice for the "down" elevator;

(f) the use of in-car lanterns are acceptable, if they are visible from the area in front of the call button.

(8) (a) The minimum time in response to car calls for elevator doors to remain fully open shall be three seconds;

(b) Door re-opening devices shall remain effective for a period of at least 20 seconds; after this time, doors may close in accordance with C.S.A. Standard, Safety Code for Elevators, Dumbwaiters, Escalators and Moving Walks.

(9) The minimum clear door width shall be as specified in Table 2.

(10) (a) Elevator doors shall open and close by automatic means;

(b) The doors shall be provided with a re-opening device which will stop and re-open a car door and adjacent hoistway door automatically if the door is obstructed by an object or person while closing;

(c) The re-opening device shall be capable of completing these operations without requiring contact for operation if the object or person passes through sensing devices located at a height of 130 mm and 800 mm from the floor.

(11) The floor plan of elevator cars shall allow people in wheelchairs to enter and leave the car, and a space to manoeuver to reach the controls; the required placement of elevator controls and the minimum acceptable inside dimensions of cars of standard sizes are shown in Figure 17(11) and Table 2.

Section 17, Elevators, cont'd

(12) Elevator controls shall comply with the following requirements:

(a) all characters shall be 15 mm high, have sharply defined edges, and contrast in colour with the face plate; permanently applied plates are acceptable;

(b) characters shall be to the left of the buttons;

(c) raised buttons are preferred, but recessed buttons are acceptable providing the recess does not exceed 6.35 mm;

(d) the minimum size of the button shall be 20 mm not including any lighting around the button;

(e) the highest floor buttons shall be no higher than 1.4 m from the floor level to the centre of the buttons;

(f) when two vertical rows of buttons are required, odd numbers shall occur on the left hand side and even numbers on the right hand side;

(g) when three or more vertical rows of buttons are required, the buttons shall be numbered from the bottom left to right as shown in Figure 17(12);

(h) visual indication shall be provided to show each call registered and extinguished when that floor is reached;

(i) emergency controls shall be grouped at the bottom of the control panel and be 890 mm from the floor level to the centre of the emergency button.

(j) standard symbols shall be used to designate essential controls and shall be as shown in Figure 17(12).

Section 17, Elevators, cont'd

(13) (a) A car position indicator shall be provided above the car control panel or over the opening in each car to show the position of the elevator in the hoistway; as the car passes or stops at floors served by the elevator, the corresponding numeral shall illuminate and an audible signal shall sound. An automatic verbal annunciation of the floor number at which the car stops may be substituted for the audible signal, and is preferred.

(b) Numerals shall be a minimum of 15 mm high; the audible signal or automatic verbal annunciation shall be no less than 20dB.

(14) Handrails shall be provided on the side walls of the car, mounted at a height of 815 mm to 915 mm from the floor of the car. The rail shall have 40 mm clearance between the wall and the rail. A handrail also on the rear wall is preferred. See Section 16, Handrails and Guardrails.

(15) An emergency two-way communication system between the elevator and a point outside the hoistway shall be provided in compliance with the following requirements:

(a) If the system is normally connected to the building power supply, it shall automatically transfer to a source of emergency power within 10 seconds of the failure of normal power supply;

(b) the emergency power source shall be capable of providing two-way communication for at least 4 hours;

(c) the highest operable part of a two-way communication system shall be a maximum of 1.2 m from the floor of the cab;

(d) the location of the communication system shall be identified with a raised or incised symbol adjacent to the device;

Section 17, Elevators, cont'd

(e) a system without a handset is preferred;

(f) a light shall be provided to signal to any deaf person when his emergency call has been answered.

(16) There shall be no sharp edges or rough surfaces in the elevator car or hoistway opening.

(17) (a) The floor finish shall be slip resistent. See Section 25, Floor Surfaces.

(b) When carpet is used in the car, it shall be laid without underlay, securly attached to the floor and have a tight weave and low pile; uncut pile is preferred.

(18) The gap between the threshold of the elevator car and the lobby floor (running clearance) shall be no wider than 32 mm.

(19) The minimum illuminations at the car controls, car thresholds and landing sill shall be a minimum of 100 lx.

Public Toilet Rooms

18. (1) Public toilet rooms shall be located adjacent to accessible paths of travel that comply with the requirements of Section 13, Interior Paths of Travel.

(2) Visual and tactile directions to the public toilet rooms shall be given in circulation areas, and comply with the requirements of Section 22, Communication and Identification.

(3) (a) The symbol and/or name on the toilet room door shall be raised or incised a minimum of 0.8 mm from the surface. If a symbol is used, it shall comply with Section 22(11).

(b) The characters shall be at least 64 mm high and shall be mounted 1.4 m to 1.5 m from the floor surface.

Section 18, Public Toilet Rooms, cont'd

(c) The symbol or character shall be in a contrasting colour from the background. See Section 22, Communication and Identification.

(4) (a) Toilet room doors shall comply with Section 11, Entrances, Doors and Doorways.

(b) Where door vents are required, they shall be located so that they will not interfere with the drive rim or footrests of wheelchairs.

(c) Door handles shall meet the requirements of Section 12, Door Handles.

(5) (a) Where there is a passageway from the corridor entrance to the toilet room, the passageway shall be:

(i) a minimum of 1 m in width if a turn of 90 degrees or less is necessary; or

(ii) a minimum of 1 m in width with the turn space a minimum of 1.2 m in width if a turn greater than 90 degrees and less than 180 degrees is necessary.

(6) The toilet room floor finish shall comply with the requirements of Section 25, Floor Surfaces.

(7) (a) At least one toilet stall in each public toilet room shall comply with the requirements of subsection (8).

(b) Where the required number of fixtures, as established by the authority having jurisdiction, indicates that a single, individual toilet room is adequate, that toilet room shall comply with all the requirements of Section 18, Public Toilet Rooms.

(8) (a) The accessible toilet stall shall have a minimum of 1.5 m x 1.5 m clear internal dimensions.

Section 18, Public Toilet Rooms, cont'd

(b) Toilet stalls of the minimum dimensions shall have wall mounted water closets; floor mounted water closets are acceptable if the depth of the stall is increased to 1830 mm.

(c) The door of the toilet stall shall swing outward, have a 750 mm clear opening, and shall be self-closing.

(d) Opening and locking devices shall not require a pinching or twisting of the wrist to operate.

(e) Water closets shall be located 500 mm from the right or left hand partition to the centre line of the fixture.

(f) A grab bar shall be placed on the side partition nearest to the water closet, with a distance of 330 mm from the top of the toilet seat to the grab bar, and with a maximum distance of 305 mm from the rear wall to the grab bar. The grab bar shall be a minimum of 1 m in length. See Figure 18(8).

(g) If the water closet does not have a tank, a grab bar shall also be placed behind the water closet, with a distance of 330 mm from the top of the toilet seat to the grab bar, and a maximum distance of 150 mm from the nearest side partition to the grab bar. The grab bar shall be a minimum of 915 mm in length. See Figure 18(8).

(h) Grab bars shall comply with Section 27, Supports.

(i) Flushing mechanisms shall be automatic or operable without extremes of bending, reaching or twisting, and shall be activated by a non-precise movement requiring a light pressure; flushing mechanisms requiring pedal operation shall not be used.

Section 18, Public Toilet Rooms, cont'd

(j) The height of the toilet seat shall be 430 mm to 485 mm measured from the floor to the top of the toilet seat.

(k) The toilet seat shall have a cover.

(l) Manoeuvering space in front of the toilet stall door shall be a minimum of 1 m clear space where a person in a wheelchair is required by site conditions to make a right angled turn into the stall.

(m) Wall and ceiling partitions are preferred to floor mounted partitions.

(n) Tissue dispensers shall be placed 860 mm to the centre from the rear wall on the side partition nearest to the water closet, and shall be mounted immediately below the grab bar on the side partition.

(9) (a) At least one lavatory shall:

(i) be placed to allow front approach by a person in a wheelchair. If a 90 ° turn is required from the accessible toilet stall door to this lavatory, a clear space, a minimum of 1 m in width shall be provided; if a turn greater than 90° and less than 180° is required, a clear space a minimum of 1.2 m shall be provided;

(ii) have a clearance underneath a minimum of 670 mm from the floor to the underside of the apron, and a maximum 864 mm to the top of the lavatory bowl.

(b) All exposed hot water pipes and drains shall be fully insulated if the water temperatures exceed 40°C.

(c) Undersurfaces of the lavatories shall be smooth.

Section 18, Public Toilet Rooms, cont'd

(d) The "hot" faucet shall be on the left hand side of the lavatory and the "cold" faucet shall be on the right hand side.

(e) The temperature of the hot water shall be no greater than 40°C at the faucet.

(f) Faucets shall have a lever, blade or multi-arm type handle or other design that does not require grasping or twisting of the wrist or pedal operation as the only means of operation; single level controls are preferred.

(g) Force needed to activate the faucet should be minimal, and shall be no greater than 13 N.

(h) Spring-operated faucets shall have a delay feature which allows the water to run for at least 10 seconds after the hand is removed from the faucet.

(10) Where wall-mounted urinals are provided, one urinal shall:

(a) have sufficient floor area in front of, and under, the urinal to allow a wheelchair approach to bring the front edge of the seat to the lip; and

(b) have an elongated lip and be mounted 380 mm to 430 mm from the floor surface to the top of the lip; and

(c) have at least 410 mm clear width to each side of the centre line of the urinal to facilitate wheelchair approach.

(d) be provided with a grab bar on both sides.

(11) Mirrors shall be mounted with the bottom edge a maximum of 1 m from the floor surface, except that a higher mir

Section 18, Public Toilet Rooms, cont'd

ror is acceptable if it is tilted to allow use by a seated person.

(12) (a) Dispensers and receptacles shall be located so that they do not interfere with circulation, shall be free from hazards, rough surfaces or sharp edges, and be convenient to use.

(b) Dispenser controls shall not require grasping or twisting of the wrist to operate, and shall be operable by non-precise movement.

(c) All dispensers and receptacles shall be mounted so that the highest operable part is a maximum of 1 m above the floor surface.

(13) (a) Hot air hand drying equipment shall be designed so that hands cannot accidentally touch the heating element.

(b) The surface temperature of any part of a hand drier directing warm air shall not exceed 40 degrees celsius.

(14) Unit washrooms shall have a minimum floor space of at least 3.7 m^2 with no dimemsion less than 1675 mm.

Drinking Fountains

19. (1) Drinking fountains and water coolers shall not be located in an alcove unless:

(a) the clear width of the alcove is 600 mm for depths not exceeding 485 mm, or a clear width of 815 mm for depths exceeding 485 mm; and

(b) the head of the recess is no lower than 2 m from the floor.

(2) (a) The height from the floor to the spout shall be 760 mm to 915 mm.

(b) If a spigot is provided, it shall be 760 mm to 915 mm from the floor, and there shall be a cup dispen-

Section 19, Drinking Fountains, cont'd

ser next to the spigot mounted no more than 1 m from the floor to the cups.

(3) (a) The spout of the drinking fountain or water cooler shall be at the front of the equipment and should preferably direct the flow of water parallel to the front edge.

(b) The fountain or cooler shall allow the insertion of a cup 100 mm high under the flow of the water.

(c) The maximum volume and trajectory of the water shall be controlled by a device located to prevent adjustment by unauthorized persons, and not by the user's hand control.

(4) (a) Hand controls shall be required, and shall be operable without the need for precise grasping and twisting, or pinching. A lever is preferred, and a multi-arm type of handle is acceptable.

(b) The force to operate shall be no greater than 13 N.

(5) There shall be no sharp edges or corners on drinking fountains or water coolers.

(6) (a) Exterior drinking fountains and water coolers shall be located along accessible paths of travel.

(b) Where the fountains and coolers are located immediately alongside the accessible path of travel, the hard paved surface shall extend at least 600 mm beyond the equipment at both sides.

Shower Rooms

20. Where showers are provided in other than accommodation, services or facilities referred to in Section 1(2)(d), a minimum of one of the showers for each sex shall comply with the following requirements:

Section 20, Shower Rooms, cont'd

(1) (a) inside dimensions shall be a minimum of 915 mm by 915 mm;

(b) a well-padded seat shall be positioned 485 mm above the floor and may be hinged to fold up against the wall;

(c) grab bars shall be installed on two walls at 330 mm above the seat;

(d) the grab bars and the padded seat shall meet the requirements of Section 27, Supports;

(e) the soap tray shall be a maximum of 1 m above the floor;

(f) the shower stall shall have a floor surface in compliance with Section 25, Floor Surfaces.

(2) (a) Water controls shall be of a single lever design.

(b) A flexible hand held shower spray shall be installed with a hook to hold it, and shall be located 1 m to 1.2 m above the floor surface.

(c) The hose shall be a minimum of 1.4 m in length.

(d) A diversionary valve shall be installed to change the water flow from the hand held shower to the fixed head shower.

(e) The temperature of hot water delivered to the shower shall not exceed 40°C.

(3) Where gang showers are provided:

(a) an individual shower in compliance with this section is not required unless there is a curb preventing wheelchair access to the gang shower;

Section 20, Shower Rooms, cont'd

(b) a seat, grab bars, soap tray and floor surface are required in compliance with Section 20(1); and

(c) at least one water control and flexible hand held shower spray shall be provided and meet the requirements of Section 20(2).

Coin Operated Public Telephones

21. (1) (a) Pay telephones shall have the highest operable part of the telephone at 1.4 m above the floor level where there is side access for persons in wheelchairs.

(b) If structural constraints prevent side access, one telephone in the bank shall be located with the highest operable part of the telephone at 1.2 m above the floor level.

(2) Pay telephones shall be mounted on walls, free-standing pylons, or in enclosures without doors:

(a) Bases and enclosures shall not impede the approaches to the equipment by those in wheelchairs.

(b) There shall be 760 mm clearance from the floor surface to the underside of any enclosure or shelf, with the exception of telephones mounted at 1.2 m from the floor to the highest operable part.

(3) (a) Where site conditions allow, telephones shall be located outside of paths of travel to prevent hazardous conditions for blind pedestrians.

(b) Where there is insufficient room to locate the telephones outside of paths of travel, the placement of the telephone shall comply with Section 5(10).

(4) Entrances to telephone enclosures shall have a clear width of at least 760 mm.

Section 21, Coin Operated Public Telephones, cont'd

(5) Telephone books, if provided, shall be located to allow access and use by persons in wheelchairs; loose books, if provided, shall be equipped with a tether.

(6) Telephones shall have push button controls where this service is available.

(7) The length of the cord from the telephone to the handset shall be a minimum of 760 mm.

(8) To aid the visually impaired in making operator assisted calls, the calling number shall be provided to the operator by:

(a) electronic means; or

(b) providing the telephone number as raised numerals placed below the dial buttons, such numerals to be 15 mm high and raised 0.8 mm.

(9) Telephone receivers shall generate a magnetic field in the area of the receiver cap.

(10) The illumination at the telephone controls shall be a minimum of 100 lx, provided by the subscriber or lessee.

(11) An adjustable volume control shall be provided and clearly marked in at least one telephone in every bank of telephones at:

(a) government buildings;

(b) hotels and motels;

(c) transportation terminals;

(d) medical facilities, including active treatment hospitals;

(e) shopping centres;

Section 21, Coin Operated Public Telephones, cont'd

(f) department stores; and

(g) any other building or facility where an evidenced need for an adjustable volume control is brought to the attention of the telephone company.

(12) A telewriter shall be provided at:

(a) government buildings;

(b) active treatment hospitals;

(c) police stations;

(d) transportation terminals;

(e) any other building or facility where an evidenced need for a telewriter is brought to the attention of the telephone company.

Communication and Identification

22. (1) Where identification signs, directional signs including maps, or layouts, or informational signs are required, they shall be:

(a) provided in tactile form;

(b) located where they can be seen by a seated person;

(c) if displayed horizontally, the lowest part shall be no greater than 800 mm from the floor surface.

(2) Where directional signs are used in buildings or facilities to indicate the location of toilets, vertical circulation, room or unit numbers, or spaces with different functions:

(a) signs shall be located to provide maximum visual exposure along paths of travel, particularly at the

Section 22, Communication and Identification, cont'd

intersection of paths of travel and elevator lobbies; and

(b) there shall be a consistency of location and type of sign providing information throughout a building or facility.

(3) Where room identification signs and numbers are used:

(a) they shall have raised or incised characters of at least 0.8 mm, sharply defined edges, and be at least 15 mm high; and

(b) they shall be placed alongside the door at the latch side, and mounted at a height of 1.5 m;

(c) the type of sign shall be consistent throughout the building or facility.

(4) Characters on emergency, directional and instructional signs shall have a stroke width to height ratio of 1:6 to 1:10; and a character width to height ratio of 3:5 to 1:1. See Figure 22(4).

(5) Signage shall have contrasting colours and intensity between the characters and the background, preferably a light colour on a dark background and shall conform to Section 3.4.6(3) of the National Building Code.

(6) Signs shall have glare-free surfaces which will not interfere with legibility.

(7) Signs with descriptive material about government buildings, monuments and objects of cultural interest shall have raised letters if audio tape devices, sighted guides, or braille brochures are not available to present the identical information.

Section 22, Communication and Identification, cont'd

(8) (a) (i) The international symbol of accessibility shall be displayed at all major entrances to a building or facility;

(ii) If an addition is constructed to an existing building or facility, every inaccessible entrance to the existing building or facility shall display the symbol of accessibility with directions placed immediately alongside the symbol indicating the direction to the nearest major entrance to the addition. The major entrances to the addition shall comply with Section 22(8)(a)(i).

(b) Where signs, building layout diagrams or maps are provided, the International Symbol of Accessibility shall be used to indicate where accessible elevators are located.

(c) Where reserved parking spaces are provided for persons with physical disabilities, the International Symbol of Accessibility shall be mounted on a pole or wall, facing the direction of entry, and may be accompanied by markings painted on the parking surface.

(9) The International Symbol of Accessibility to be displayed is shown in Figure 22(9).

(10) The Symbol for male or female facilities to be displayed is shown in Figure 22(10).

Emergency Warning Signals and Alarms

23. Emergency warning signals and alarms shall be located and designed such that they can be readily seen, heard and understood.

(1) Both visual and audible emergency warning signals and alarms shall be provided:

Section 23, Emergency Warning Signals and Alarms, cont'd

(a) illuminated emergency exit signs shall flash as a visual emergency alarm with a frequency not exceeding 5 Hz;

(b) audible emergency alarms shall be provided as required by the National Building Code, Section 3.2.4.1(1) and Table 3.2.4.A, and shall be the Type 5 fire alarm system as defined in Section 3.2.4.2(1).

(2) (a) Visual emergency alarm devices shall be located so that the signal and/or reflection may be seen anywhere in the space served by the alarm.

(b) If such systems utilize a permanently installed electrical power source, they shall be installed on the same circuit as the audible emergency alarms.

(c) Visual emergency alarm devices may also be wireless and portable.

(3) Where microwave ovens are installed, notices shall be posted to warn, in advance, persons with heart pacemakers.

(4) Fire alarm activating devices shall be located 1.2 m to 1.4 m from the floor level to the centre line of the operable mechanism, and meet the requirements of Section 26, Location of Controls, Dispensers and Receptacles.

Tactile Cues

24. (1) Tactile cues shall be provided when required by this Standard to prepare, alert or warn persons with vision loss or impairment of changes or hazards in the built environment, and includes, but is not limited to:

(a) possible hazards in the pedestrian path which may result in falls;

(b) conflicts with vehicular traffic;

Section 24, Tactile Cues, cont'd

(c) hazardous locations outside the path of travel;

(d) the edge of stairs.

Curb edges are an acceptable tactile cue.

(2) Where tactile cues are required:

(a) the texture pattern of the tactile cue on the interior or exterior walking surface shall be consistent throughout the accommodation, services or facilities;

(b) the texture pattern of tactile cues on handrails shall be consistent throughout the accommodation, services or facilities.

(3) The tactile cue pattern shall not be used on any other interior or exterior surface of the accommodation, services or facilities.

(4) The tactile cue on walking surfaces, except where the tactile cue is a curb edge, shall meet the following requirements:

(a) The pattern of the tactile cue shall be:

(i) applied strips to the walking surface forming groves 3 mm deep between the strips, and bonded to the surface to prevent delamination; or

(ii) a continuous sheet material with grooves 1.5 mm minimum depth forming an integral part of the surface, and bonded to the surface of the walkway base material; or

(iii) grooves of 3 mm deep, cut or formed in the surface of the walkway base material; or

(iv) a change of material from that used on the walkway to another material with grooves 3 mm deep, cut or formed in the surface.

Section 24, Tactile Cues, cont'd

(b) The width of a tactile cue perpendicular to the groove shall be 600 mm if there is a perceptible difference in hardness between the walkway and the tactile warning signal, and 900 mm if there is no perceptible difference. See Table 3 for comparison of hardness or walkway materials perceptible to persons with visual loss.

(c) Grooves shall be 6 mm wide and spaces 19 mm to 50 mm apart.

(d) The pattern shall not be random.

(e) Tactile cues shall have a contrasting colour to the walkway surface colour to aid persons with visual impairment.

(5) To provide advance warning of curb ramps, the surface of the ramp shall have a change in texture and colour from that of the surrounding walk.

Floor Surfaces

25. Indoor and outdoor floor surfaces shall not present slipping hazards to ambulatory and semi-ambulatory people, nor present obstacles to the movement of people in wheelchairs.

(1) Outdoor floor and walk surfaces in accessible areas shall not have large or continuous areas of small unit components, such as brick or stone, unless they are laid on a firm and stable base, the joints are flush with adjacent surfaces and they are not more than 13 mm wide.

(2) Small unit components shall not be used on stairs unless the edge of the tread is of a contrasting colour and clearly distinguishable from any joints.

(3) Carpet laid on floor, stair or ramp surfaces shall be securely attached, have a tight weave, low pile and firm underlayment; in paths of travel, no underlayment and an uncut pile is preferred.

Section 25, Floor Surfaces, cont'd

(4) Heavily patterned carpet, especially designs incorporating stripes, shall not be used on stairs.

(5) (a) Exposed edges of carpet shall be fastened to floor surfaces with trim along the entire exposed edge;

(b) Carpet trim shall be bevelled with a slope of no greater than 1:2.

(6) All floor finishes shall be slip resistant, firm and stable, and the friction coefficient of the surface shall be no less than 0.5 wet or dry.

Location of Controls, Dispensers and Receptacles

26. (1) All user operable controls, dispensers, vending machines and receptacles shall be located to enable people in wheelchairs to position themselves within reach of operable parts.

(2) (a) Where side access for those in wheelchairs is possible, the highest operable part of user operable controls, dispensers, vending machines and receptacles shall be located a maximum height of 1.4 m from the floor to the centre of the operable part of the device.

(b) Where location allows forward access only for those in wheelchairs, the maximum height of the highest operable part from the floor to the centre shall be 1.2 m.

(c) In toilet rooms and restrooms, dispensers and receptacles shall be mounted with their highest operable part no more than 1 m above the floor surface. See also Section 18 (12), 18 (13), 19 (1), and 19 (2).

(d) Fire alarm pulls or buttons shall be located 1 m to 1.2 m from the floor level to the centre of the device. See Section 23 (4).

Section 26, Location of Controls, Dispensers and Receptacles, cont'd

(3) (a) User operable controls shall not require tight grasping or pinching to activate.

(b) The force required to activate controls shall be minimal, and shall not exceed 13 N.

(c) Push button, solenoid type controls are preferred over pull-type mechanisms.

(d) Click stop controls are preferred where a range of operations are controlled by a single control device.

(4) User operable controls, dispensers and receptacles shall not require the use of two hands, or two simultaneous movements by one hand, to operate.

(5) (a) Slots shall be designed to allow for the insertion of coins, tickets or cards in an imprecise manner.

(b) There shall be a guide at the slot to aid the insertion of coins, tickets or cards.

(c) Vending machines shall have sufficient space in coin returns and change receptacles to bend fingers when picking up the coins.

(6) There shall be a minimum illumination of 100 lx at all user operable controls, dispensers and receptacles.

Supports

27. Supports are grab bars, handrails, guardrails, railings, and other devices which provide support or assistance to people.

(1) Supports, fasteners and mounting devices shall withstand a load of at least 1100 N applied anywhere along the length of the support.

(2) The outside diameter or width of supports shall be 32 mm to 38 mm.

Section 27, Supports

(3) Supports mounted next to the wall shall have a clear space of 38 mm to the wall.

(4) If projecting ends of supports are hazardous to passers-by, they shall return smoothly to wall, floor or supporting surface.

(5) Supports shall have no sharp edges or dangerous protrusions, including the fasteners; edges shall have a minimum radius of 3 mm.

(6) Grab bars in toilet rooms shall be knurled.

Electrical Fixtures and Controls

28. (1) Electrical wall outlets shall be mounted at a minimum of 450 mm above the floor as measured to the centre line of the outlet. For mounting height of switches, thermostats, alarm devices and other user operable controls, see Section 26, Location of Controls, Dispensers and Receptacles.

(2) Light switches and thermostats shall not require grasping or pinching in order to activate.

(3) Light switches in hotels and motels shall be illuminated in the bathroom, bedroom and in the hallways between the bathroom and bedrooms.

Plumbing Fixtures

29. (1) All exposed pipes below 1.2 m from the floor that exceed a temperature of 40°C shall be thermally insulated.

(2) There shall be no sharp or abrasive surfaces under sink or lavatory bowls.

(3) (a) Faucets shall be of a lever design or other designs that do not require grasping or twisting of the wrist as the only means of operation; single lever mixing type faucets are preferred.

Section 29, Plumbing Fixtures, cont'd

(b) Forces needed to activate the faucets shall be as small as possible and shall be no greater than 13 N.

(4) For detailed requirements for accessible water closets, lavatories, drinking fountains, and shower rooms, see Section 18, Public Toilet Rooms, Section 19, Drinking Fountains, Section 20, Shower Rooms.

Appliances for Public Use

30. (1) If appliances are provided for public use in accommodation, services or facilities referred to in Section 1(2)(d), they shall be located in accessible rooms and at least one of the appliances in each room shall have all user controls and compartments within reach of a person in a wheelchair.

(2) Dispensers shall be located so that the highest operable part is 1 m to 1.2 m from the floor surface.

(3) Unit air conditioners shall be installed so that all controls and adjustments that are essential for consumer use are within reach of a person in a wheel chair, and mounted no higher than 1.2 m from the floor to the centre of the operable mechanism. See Section 26, Location of Controls, Dispensers and Receptacles.

Additional Requirements for Residential Occupancies

31. All accommodation, services and facilities referred to in Section 1(2)(d) shall conform to the following requirements, which are in addition to all other requirements of this Standard.

(1) All areas open to and useable by the public, including site facilities, lobbies, laundries, game rooms, parking garages and other such external and internal areas, shall comply with the requirements of this Standard.

(2) Doors into all dwelling units and doors or openings into any room or space within the dwelling unit, except reach-in closets or reach-in storage spaces, shall have a minimum clear width of 750 mm. See Section 11, Entrances, Doors and Doorways.

Section 31, Additional Requirements for Residential Occupancies, cont'd

(3) Hallways and corridors within the dwelling unit shall have a minimum clear width of 1 m.

(4) (a) Kitchens which have a "U" or "L" shaped cabinet layout shall have a minimum clear width of 1.5 m between the countertop front edges or countertop front edge and opposite wall.

(b) Kitchens with countertop along one side only shall have a minimum clear width of 1 m between the countertop front edge and the opposite wall.

(5) Bathrooms shall be designed:

(a) with the door opening out, or

(b) with a sliding or solid folding door, or

(c) with sufficient space in the bathroom to allow an inswinging door to pass a wheelchair, or

(d) with any other design that allows the door to be closed when a person in a wheelchair is using the room.

(6) (a) Structural reinforcement, where bathroom walls are of stud construction, shall be provided for future installation of grab bars, to be purchased and installed by the resident to meet individual needs.

(b) reinforcement shall be provided in each wall adjacent to the tub and/or shower and water closet, and shall be located 865 mm to the centre line of the reinforcing member.

(c) The reinforcement shall be capable of supporting 1100 N transferred from the grab bar.

Section 31, Additional Requirements for Residential Occupancies, cont'd

(d) Hotels, motels and other buildings in which a person can pay for accommodation on a daily basis are exempt from the requirements of subsection (a), (b) and (c).

(7) All hardware shall meet the requirements of Section 12, Door Handles, and all controls shall meet the requirements of Section 26, Location of Controls, Dispensers and Receptacles.

Hotels and Motels

32. Hotels, motels and other buildings in which a person can pay for accommodation on a daily basis shall conform to the following additional requirements:

(1) The doorways to all rooms, including bathrooms, shall be a minimum of 750 mm clear width. See Section 11, Entrances, Doors, and Doorways.

(2) The number of bedrooms and bathrooms in compliance with all the requirements of this Standard shall be at least one out of every twenty (20) rooms and/or units.

(3) Furniture in rooms and/or units referred to in subsection (2) shall be placed to allow use by persons in wheelchairs.

(4) A visual emergency warning system shall be provided for use in all sleeping rooms or units:

(a) The system may be a permanent installation in all rooms, or may be a portable device provided by the hotel or motel to be installed in a room or unit as requested by a deaf person, and shall meet the requirements of Section 23, Emergency Warning Signals and Alarms;

(b) At least two portable visual emergency warning devices shall be available if there is no permanent installation.

Section 33, Educational Facilities, Libraries and Museums

Educational Facilities, Libraries and Museums

33. All spaces in eduational facilities, libraries and museums used by students, faculty, staff and visitors shall meet the requirements of this Standard.

(1) Two percent, or a minimum of two lockers in every room where lockers are provided, shall be on an accessible path of travel for persons in wheelchairs, and shall be located within a range of 230 mm to 1.2 m from the floor with a minimum clear space in front of 1 m.

(2) Where showers are provided, they shall meet the requirements of Section 20, Shower Rooms.

(3) (a) In each laboratory and other work or study area provided with fixed work countertops, there shall be at least one station having a 760 mm clear space below the work top extending to the floor.

(b) The minimum clear space beneath this station shall be 915 mm wide and 600 mm deep.

(c) The clear aisle width between work tops shall be 915 mm.

(4) Aisles between fixed stacks in libraries shall be 1 m.

(5) In museums, every building level with displays open to the public shall be accessible to persons with physical disabilities:

(a) An information source shall be located adjacent to the main entrance to give audible and visual directions and information for people with severe auditory or visual impairment;

(b) The information source should provide full information for use of the facility by the public;

(c) Displays shall be designed so that they can be seen by a seated person.

Section 33, Educational Facilities, Libraries and Museums, cont'd

(6) Toilet stall size shall conform with Section 18(8), except that if facilities are intended for use specifically for students under twelve years of age, the following criteria shall be used for toilet stalls:

(a) the water closet height shall be 390 mm to the top of the seat from the floor surface;

(b) toilet grab bar size shall be 32 mm with a 38 mm space between the grab bar and the wall;

(c) the grab bar on the side partition nearest to the water closet shall be a minimum of 915 mm in length, with 500 mm length extending beyond the front edge of the water closet, such grab bar to be mounted 254 mm above the seat;

(d) if the water closet does not have a tank, a grab bar a minimum of 760 mm in length shall also be placed above the water closet, such grab bar to be mounted 255 mm above the seat;

(e) grab bars, fasteners, and mounting devices must be capable of supporting a 670 N load applied anywhere along the length of the grab bar;

(f) the lavatory height shall be 730 mm below the apron to the floor surface;

(7) If facilities are intended for use specifically for students under twelve years of age, the following additional criteria shall be used:

(a) maximum height of user operable controls, receptacles and dispensers shall be 1 m from the centre of the operable part to the floor;

(b) handrails shall be 600 mm from the centre of the bar to the floor surface;

Section 33, Educational Facilities, Libraries and Museums, cont'd

(c) water fountain spigots and spouts shall be 760 mm from the floor surface;

(d) the highest operable mechanism of a telephone shall be 1.2 m from the floor surface.

Health Facilities

34. All health facilities used by visitors and staff shall meet the requirements of this Standard.

(1) (a) Where in-patient medical care is provided, all patient rooms and bathrooms shall have minimum clear door openings 750 mm.

(b) Patient bedrooms with bathrooms shall comply with the requirements of this Standard.

(c) Bedroom furniture shall be placed to allow use by persons in wheelchairs.

(2) (a) A visual emergency warning system shall be provided for use in any sleeping room or suite.

(b) The system may be a permanent installation in all rooms or may be a portable device provided by the health care facility on request by a deaf person to be installed in a room or suite as needed, and shall meet the requirements of Section 23, Emergency Warning Signals and Alarms.

(c) Visual emergency alarm devices may also be wireless and portable.

Transportation Terminals and Stations

35. All transportation terminals and stations shall meet the requirements of this Standard.

(1) An information source shall be located immediately adjacent to main entrances of transportation terminals and stations to give visual and audible directions or infor-

Section 35, Transportation Terminals and Stations, cont'd

mation to people with severe visual or auditory impairments.

(a) The source may be a directline telephone, intercom or a clearly identified employee.

(b) Printed information shall be available for persons with speech and hearing impairments.

(c) The audible and visual information source shall provide full information for use of the facility by the public. See Section 22, Communication and Identification.

(2) (a) Where floor plans or maps of the building are at entrances, such plans shall be oriented from the standpoint of the viewer, and shall clearly indicate the viewer's position.

(b) The floor plans or maps shall also show all vehicle embarking and disembarking points, entrances and exits, ticket counters, public lockers, telephones and restrooms.

(3) Directions to all areas serving the public shall be clearly identified as required by Section 22, Communication and Identification.

Recreation Facilities

36. Recreation facilities such as cabins, campsites, concession stands, craft areas, boat docks, swimming pools, zoos, beaches, botanical gardens, amusement parks, fair grounds, bowling alleys, playgrounds, marinas, sports facilities and other communal areas shall meet the requirements of this Standard.

(1) (a) Nature trails and paths shall be developed to allow access to persons in wheelchairs, semi-ambulatory persons, and persons with visual impairment.

(b) Trails over steep or difficult terrains in wilderness areas need not be accessible, but alternate

Section 36, Recreation Facilities, cont'd

accessible routes shall be provided for persons with physical disabilities to experience wilderness areas.

(2) (a) The greater of 2 or 10% of all campsites shall have a 3.7 m side parking space and an accessible path of travel to level campsite locations and fire pits, where provided.

(b) The parking and pathway shall be of a firm and stable surface and shall not present slipping hazards; if boardwalks are provided, they shall be treated to eleminate slipping hazards.

(3) Where provided, all allied facilities such as parking, horizontal and vertical paths of travel, entrances, toilet facilities, changing and shower facilities shall meet the specific requirements of this Standard.

Auditoria, Arenas, Assembly Halls and Stadia

37. Places of assembly, including allied facilities such as lobbies, ticket offices, stage and backstage areas, dressing rooms and showers shall meet the requirements of this Standard; seating shall comply with the following additional requirements:

(1) The minimum number of spectator spaces accessible to persons in wheelchairs shall be computed as follows:

(a) where the total number of fixed seats is 50 or less, two spaces for wheelchair users adjacent to each other shall be provided;

(b) Where the total number of fixed seats is over 50, two spaces adjacent to each other shall be provided, plus additional spaces equal to 1% of the total number of seats. Not more than 50% of the total number of these spaces shall have removable seats.

(2) Spaces referred to in subsection (1)(b) shall be provided throughout seats of all price ranges and locations.

Section 37, Auditoria, Arenas, Assembly Halls and Stadia, cont'd

(3) Spaces provided for persons in wheelchairs shall provic sight lines equal to those provided for the majority c the audience.

(4) (a) Spaces for persons in wheelchairs shall be level and the path of travel to them shall meet the re quiremeats of Section 13, Interior Paths of Travel.

(b) The route to the closest fire exit or horizonta exit shall be an accessible path of travel.

(5) (a) Seats at least 600 mm wide, available for persons with orthotics or prosthetics, shall be located on the aisles.

(b) The minimum number of these seats shall be computed as follows:

(i) where the total number of fixed seats is 50 or less, 2 seats on the aisle shall be provided;

(ii) where the total number of fixed seats is from 50 to 400, 4 seats on the aisle shall be provided;

(iii) where the total number of fixed seats is over 400, a number of seats not less than 1% of the total number of seats and located on the aisle shall be provided throughout seats of all price ranges and locations.

(6) (a) Seats with a loop, F.M., or other type of listening system, shall be provided for persons with hearing impairment.

(b) These seats shall not be the seats or spaces provided for persons in wheelchairs or persons with orthotics or prosthetics.

Section 37, Auditoria, Arenas, Assembly Halls and Stadia, cont'd

(c) The minimum number of such seats shall be computed as follows:

(i) where the total number of fixed seats is 50 or less, 2 seats shall be provided;
(ii) where the total number of fixed seats is from 50 to 400, 4 seats shall be provided;
(iii) where the total number of fixed seats is over 400, a number of seats not less than 1% of the total number of seats shall be provided throughout seats of all price ranges and locations.

Service Counters

38. (1) All service counter areas used for business transactions shall meet the requirements of this Standard.

(2) (a) Where service counters exceeding 915 mm in height are provided for standing counters, an auxilliary counter or other space suitable for the business transaction shall be provided in the immediate vicinity and provide the same service.

(b) The auxilliary countertop shall not exceed 915 mm in height from the floor, and if required for writing purposes, a space a minimum of 760 mm clear to the floor, 815 mm wide, and 600 mm deep, shall be provided.

(3) (a) Cafeteria lines shall meet the applicable requirements of Section 13, Interior Paths of Travel.

(b) The height of counters for conveying trays shall be a maximum of 915 mm.

(c) The maximum reach of any dispenser shall be within reach limitations of wheelchair users unless employees are behind the cafeteria line at all times.

(d) Food shall be located a maximum of 450 mm from the edge of the counter.

Section 38, Service Counters, cont'd

(4) The clear width of the circulation space paralleling service counters shall be a minimum of 815 mm.

(5) Entry control devices shall not prevent access by persons with physical disabilities; when turnstiles or narrow gates are required, alternate access shall be provided immediately adjacent to the turnstile.

Dining Facilities, Mezzanines and Loggias

39. (1) Dining facilities shall meet all the applicable requirements of this Standard, including, but not limited to, parking, toilet rooms, paths of travel and elevators.

(a) Toe clearance underneath tables shall be 600 mm deep and 700 mm wide.

(b) Where fixed chairs are provided, there shall be space for wheelchairs.

(c) Where microwave ovens are installed, notices shall be posted to warn, in advance, persons with heart pacemakers.

(d) A minimum of two tables shall have adjustable lighting.

(2) A raised or depressed area in a restaurant, cocktail lounge or theatre that is less than 10% of the usable net area of the room or space in which it occurs does not require a ramp or other accessible means of entrance or egress, provided that all spaces offered to the public in such raised or depressed areas are also available in areas accessible to persons with physical disabilities.

(3) Mezzanines and loggias do not require a means of entrance or egress, or a path of travel in compliance with this Standard, provided:

(a) the mezzanine or loggia does not exceed 30% of the display of the floor below; and

Section 39, Dining Facilities, Mezzanines and Loggias, cont'd

(b) all services, displays, and merchandising available at such mezzanines or loggias are also available at floor level and accessible to persons with physical disabilities.

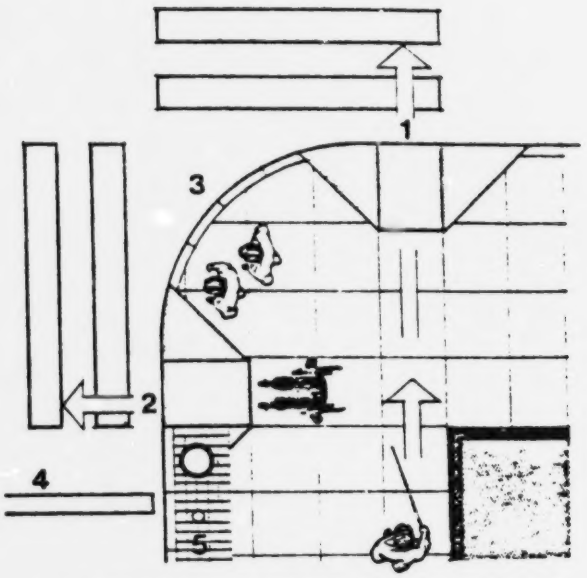
Shopping Centres and Grocery Stores

40. (1) All shopping centres and grocery stores shall provide at least one check-out point accessible to the persons in wheelchairs.

(2) Aisles shall have a minimum clear width of 815 mm and counters shall have a 915 mm maximum height from the floor.

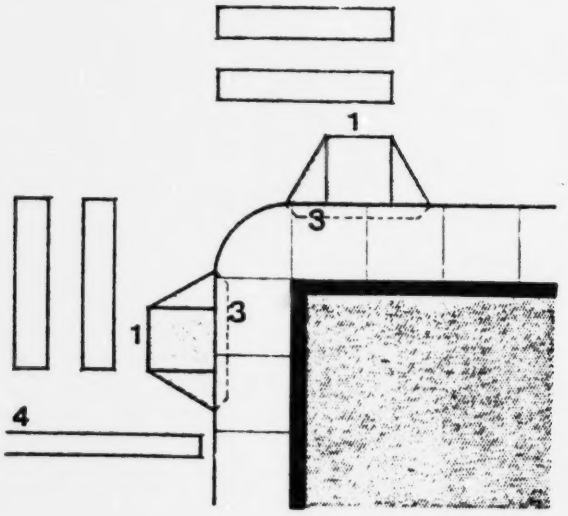
(3) (a) Any device used by stores to prevent shopping carts from leaving the premises shall not prevent access or egress to those in wheelchairs.

(b) An alternate entrance equally convenient to that provided for the ambulatory population is acceptable.



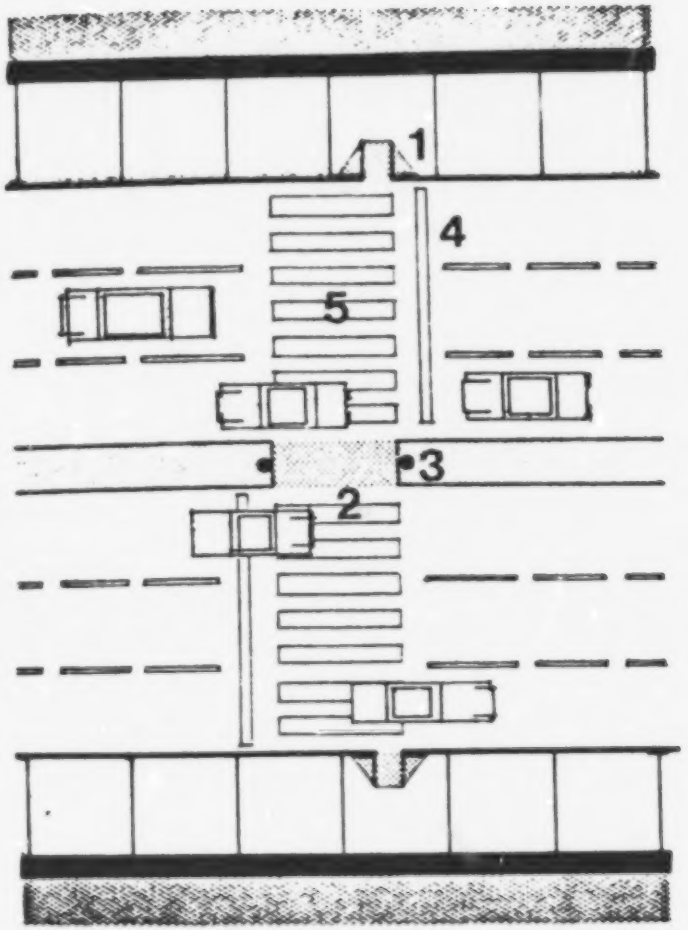
1. Curb ramp must be located inside the pedestrian crosswalk when curb ramp is located in the direct line of travel of a blind person using the building face as a location cue. The curb ramp surface shall have a texture change from the sidewalk surface.
2. Landscaped or textured strip makes curb ramp flare unnecessary. Also provides orientation cue for the blind.
3. Provide sufficient space between curb ramp flares so that pedestrians are not faced with an undulating surface.
4. Stop line for vehicles before crosswalk.
5. Site furniture can be located safely in edge strip.

FIGURE 5(4) A



1. Ramp must have a definite color and texture contrast to rest of the surfaces. Projecting ramp can take advantage of the slope of street surface, They may interfere with snowplows. Vehicles moving over them may distort or break-up the surface
2. Curb ramp flares may be a hazard to persons crossing the road if the curb is high.
3. Ramp can be partially recessed, providing sufficient level sidewalk surface remains for wheelchair movement-at least 915.
4. Stop line for vehicles before crosswalk

FIGURE 5(4) B



Island occuring in crosswalk at mid-block

FIGURE 6(3)

1. Curb ramp.
2. Island at same level as crosswalk. Island must have a texture and colour contrast to crosswalk surface.
3. Provice pole or rail support at island for aid to people with balance and aulity proble
4. Stop line for vehicles before crosswalk.
5. Marked crosswalk.

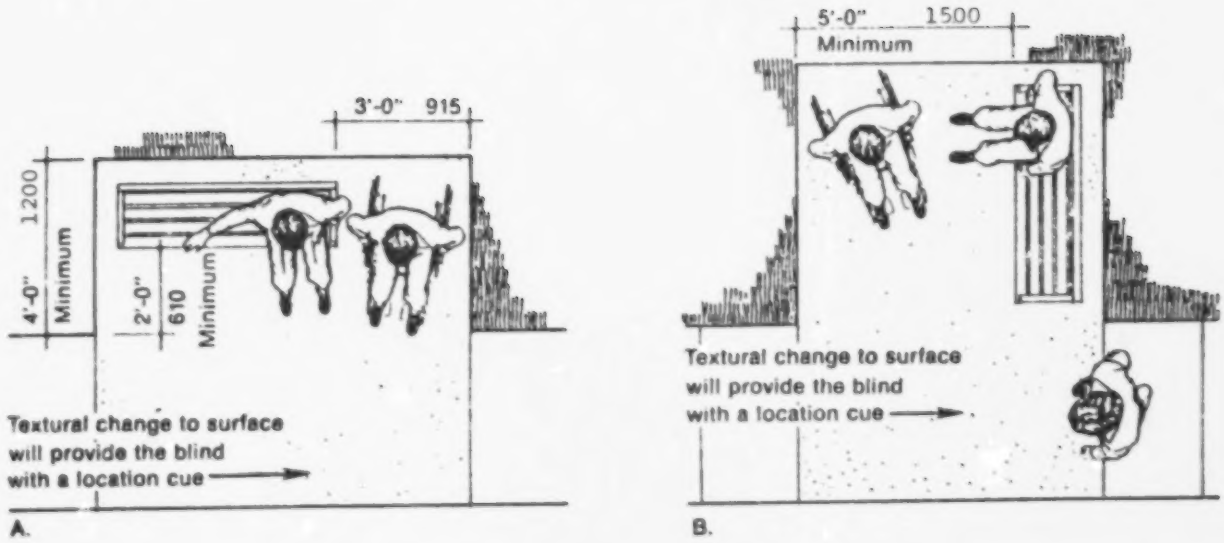

3'-0" 915
1200
4'-0" Minimum
2'-0" 610 Minimum
Textural change to surface will provide the blind with a location cue
A.
5'-0" 1500 Minimum
Textural change to surface will provide the blind with a location cue
B.

FIGURE 9(5)

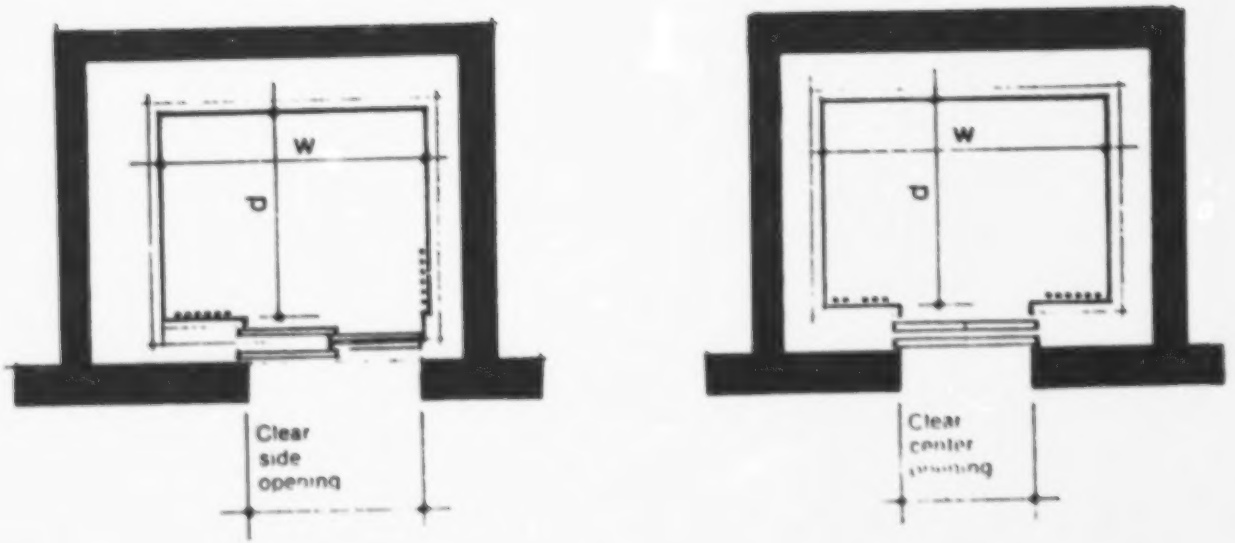


FIGURE 17 (11) (Refer also to Table 2.)

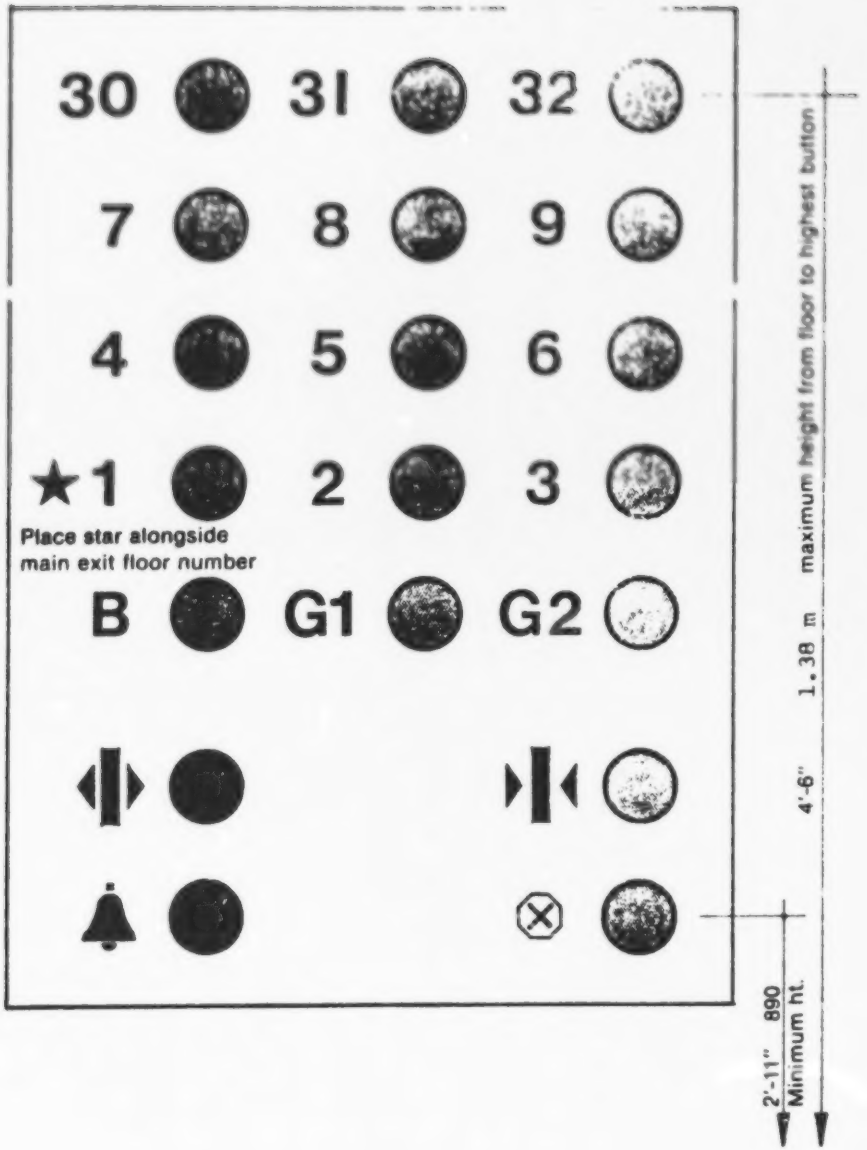

30
31
32
7
8
9
4
5
6
★1
2
3
Place star alongside
main exit floor number
B
G1
G2
maximum height from floor to highest button
4'-6"
1.38 m
2'-11"
890
Minimum ht.

FIGURE 17 (12)

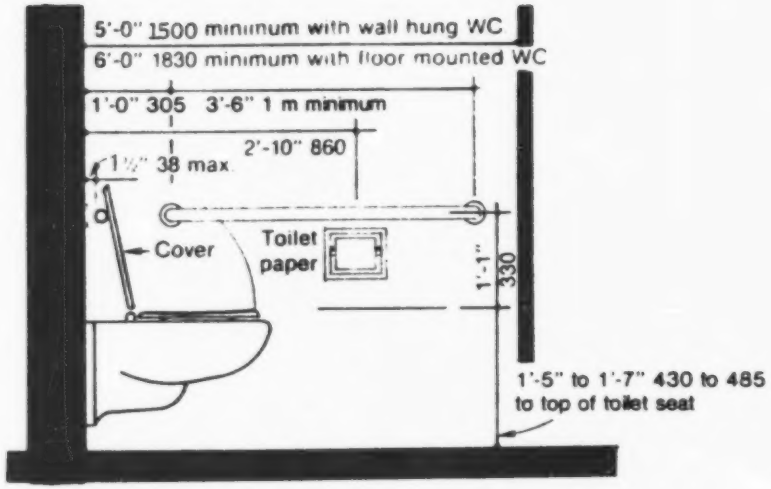


FIGURE 18(8)

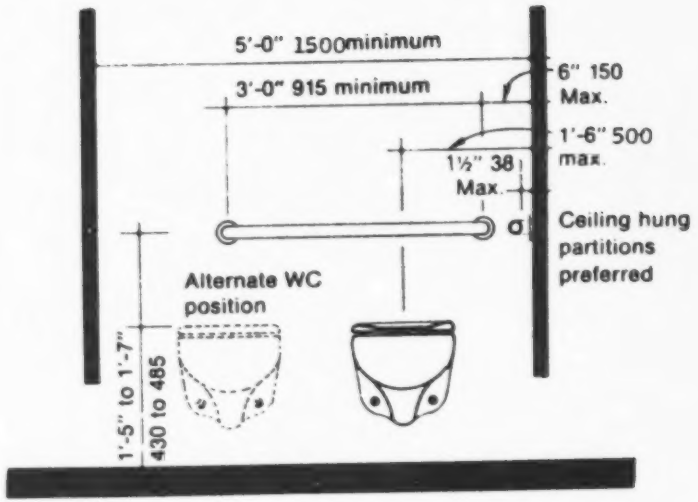
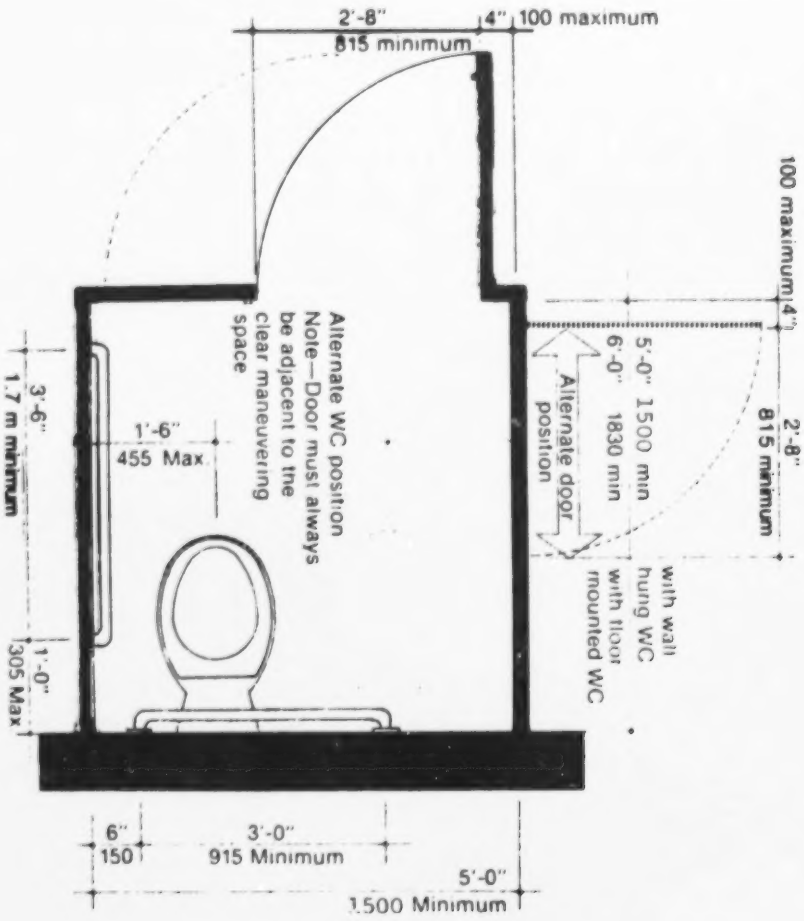
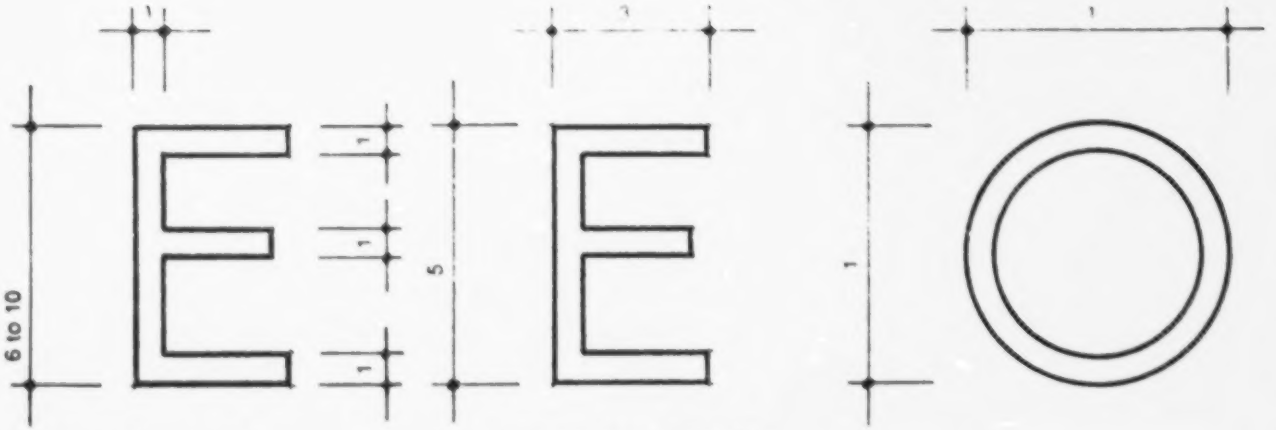


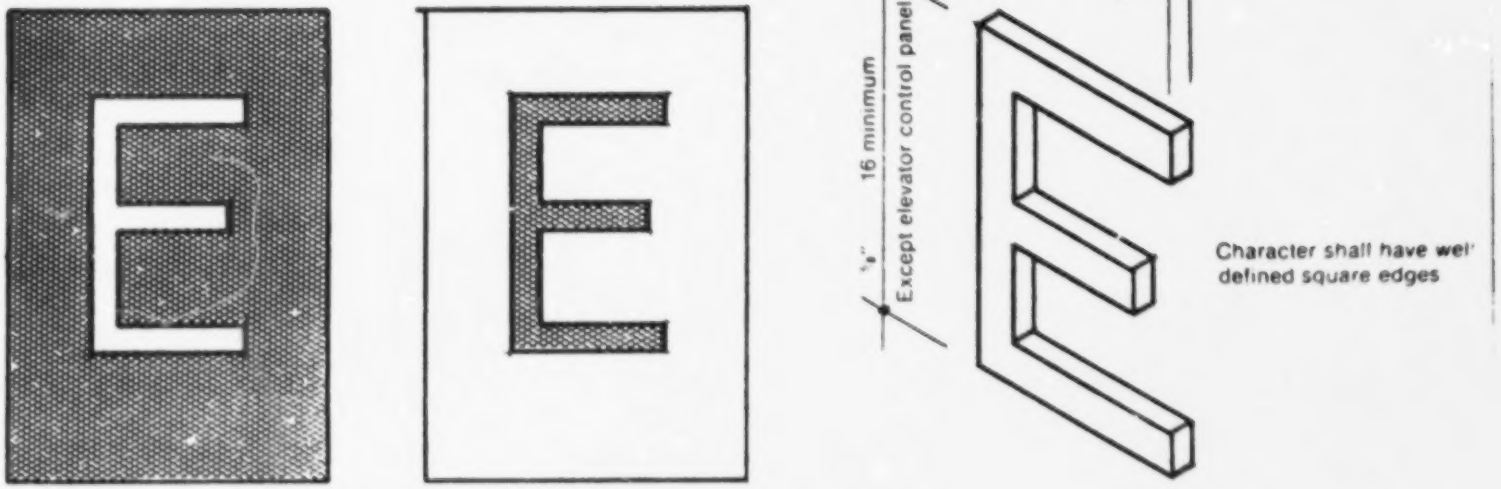
FIGURE 18(8)


2'-8"
815 minimum
4"
100 maximum
100 maximum
4"
2'-8"
815 minimum
5'-0" 1500 min
6'-0" 1830 min
Alternate door position
with wall hung WC
with floor mounted WC
Alternate WC position
Note—Door must always be adjacent to the clear maneuvering space
3'-6"
1.7 m minimum
1'-6"
455 Max
1'-0"
305 Max
6"
150
3'-0"
915 Minimum
5'-0"
1500 Minimum



Stroke width to height
Ratio 1.6 to 1 10

Character height to width ratio
3 5 to 1 1



Light color character on a dark background is preferred

FIGURE 22(4)

FIGURE 22(9)

INTERNATIONAL SYMBOL FOR ACCESSIBILITY

FIGURE 22(10)

TABLE 1

ALLOWABLE SLOPES AND MAXIMUM LENGTHS OF RAMPS

Allowable Slope	Maximum Rise in a Single Ramp Segment	Total Number of Ramp Segments Permitted	Total Rise That Can Be Accomplished	Maximum Length of a Single Ramp Segment	Total Length of Ramp Permitted	Use
1:8	150 mm	1	150 mm	1200 mm	1200 mm	Curb-ramp when it is impossible to achieve slope of 1:12 or 1:10 because of site constraints
1:10	230 mm	1	230 mm	2300 mm	2300 mm	Curb-ramps when it is impossible to achieve a slope of 1:12 because of site constraints
1:12	750 mm	2	1500 mm	9 m	18 m, plus landing	Curb-ramps and ramps
1:16 or more	750 mm	5	3 m	12 m	60 m, plus landing	Curb-ramps and ramps

The floor plan of elevator cars shall allow people in wheelchairs to enter and leave the car, and space to maneuver to reach the controls. The minimum acceptable inside dimensions of cars of standard sizes are shown in Figure 17.11 and Table 2.

Standard Size of Accessible Elevator Cars

Capacity Lbs.	Width W	Depth D	Clear Door Width	
			Side Opening	Center Opening
1500*	1370	1300	815	---
2000**	1720	1300	914	---
2500	2030	1300	1070***	1070
3000	2030	1400	1070***	1070
3500	2030	1600	1070***	1070
4000	2340	1600	---	1200***

* Does not permit a wheelchair to turn around, and shall only be used in existing buildings.
** Does not permit a wheelchair to turn around.
*** Accommodates a 1830 x 610 stretcher in the horizontal position.

TABLE 2

Comparison of Hardness of Walkway Materials Perceivable to the Blind.

1 = There is considerable change between the two and detectable by the cane.
0 = There is not a considerable change between the two and cannot be detectable by the cane.
- = Not applicable—materials unlikely to be used together.

	1. concrete	2. asphalt	3. stone or terrazzo	4. brick	5. quarry tile	6. ceramic tile	7. resilient tile	8. sheet vinyl	9. wood	10. hard packed dirt	11. rubber	12. carpet
1. concrete	0											
2. asphalt	1	0										
3. stone or terrazzo	0	1	0									
4. brick	0	1	0	0								
5. quarry tile	0	1	0	0	0							
6. ceramic tile	0	–	0	0	0	0						
7. resilient tile	1	0	1	1	1	1	0					
8. sheet vinyl	1	–	1	1	1	1	0	0				
9. wood	1	1	1	1	1	1	1	1	0			
10. hard packed dirt	1	1	1	1	1	–	–	–	1	0		
11. rubber	1	1	1	1	1	1	1	1	1	–	0	
12. carpet	1	1	1	1	1	1	1	1	1	–	1	0

TABLE 3